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Department: School of Engineering

Matricule No: LMU/SWE/21/062

**INTERNSHIP REPORT WEEK 2**

**DAY1:** Studying SQL

**ACTIVITIES**

* Arrive at 8 am and ended at 5pm.
* Morning devotion.
* Introduction to SQL(Standard Query Language), and can be divided into categories;
* Data query language.
* Data definition language.
* Data manipulation language.
* Transition control language.
* How it works
* RDBMS(relational database management system):
* Definition: It is a database which is treated as a set of table and manipulate according to the relational model of data.
* Uses and programmers: application programs

Software to process

Software to access store data

Meta-data store-data

* Knowing the codd’s 12 rule to ensure it is relational database.
* Study the relational model
* Attributes: a column head.
* Tuple: a row.
* Understanding the basic data type which include;
* Character string data type.
* Binary data type.
* Numerical data type.
* Knowing the type of key is relational data model;
* Candidate keys.
* Primary keys
* Foreign keys
* Alternate keys
* Learning SQL statements which include;
* SELECT, UPDATE, DELETE, INSERT INFO, CREATE DATABASE.
* ALTER DATABASE, CREATE TABLE, ALTER TABLE, DROP TABLE, CREATE INDEX.
* Learning SQL WHERE Clause syntax and purpose.
* Learning SQL AND, OR and NOT operators and syntax.
* Learning SQL ORDER BY keyword.
* Learning SQL INSERT INTO statement.
* Learning SQL NULL values, SQL TOP PERCENT ,SQL MIN() and MAX() functions.
* Learning SQL COUNT(), AVG() AND SUM().
* Learning SQL wildcards/MS/ sql server, SQL IN operator.

**DAY2:** Studying Database

**ACTIVITIES**

* Arrive at 8 am and ended at 5pm.
* Morning devotion.
* Knowing what database design and database design is all about.
* Knowing the phases involved in database design. Which include;
* Identifying the object and purpose.
* Requirement for various shake holders.
* Defining data entities in terms of tables.
* Identifying and define the attributes for each database entity.
* Specify the PK and FK constrains for each relational table.
* Define and establish relationship between the tables.
* Applying the database normalization rules to normalize each table.
* Create and build the database with DBMS.
* Test the database for data accuracy consistency and integrity.
* Knowing the phases involved in database model. Which include;
* Logical phase
* Physical phase
* Conceptual phase
* Studying IGEF1X;
* Introduction
* Scope: so the standard compliant data models can be read and fully understand. Involve;
* The relational model.
* Normalization.
* Relational database design.
* Layout: the document is referenced from multiple contents, laid out as follows;
* The notation.
* A reasonably detailed.
* Identifies related articles.
* Implementation skills.
* Groups formed(6 per group);
* Project: there where two projects introduced and asked to do one. Project include;
* Lost but found
* Library management system.

**DAY3:** Using MySQL Work Branch to design a database;

**ACTIVITIES**

* Arrive at 8 am and ended at 5pm.
* Morning devotion.
* Learned how to install mysql work branch in to our computer.
* Study the basic navigations needed to operate the application.
* Thought how to add tables and enter columns.
* Using the project given a “Lost but Found” to analysis, create tables, and create a relational database of the system.

**DAY4:** Writing reports;

**ACTIVITIES**

* Arrive at 8 am and ended at 5pm.
* Morning devotion.
* Writing report about our activities carried out in our week1 and current week2.

**Day 5:**

**ACTIVITIES**

* Arrive at 8 am and ended at 5pm.
* Morning devotion.
* Revision on git and database management system